

PROJECT TITLE : ANALYTICAL INVESTIGATIONS
PERIOD COVERED : MAY 26 - JUNE 26, 1980
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N-NITROSAMINES

- The determination of DMN, NNN, NNK and NATB in MS and SS of 16 experimental cigarettes of the SPOTLESS series (1) has been continued.

- Removal of DMN from cigarette mainstream smoke (2):

Filtration efficiency of cellulose acetate filters containing 7 % triacetin attached to an experimental American Blend cigarette as function of filter length was studied.

Results are summarized in the table. They show the feasibility of reducing the amount of DMN in MS to less than 1 ng/c by variation of the CA filter length.

	<u>non-filter cigarette</u>	<u>cigarette with CA filter (undiluted)</u>			
CA filter (mm)	--	10	14	18	22
DMN (ng/c) *)	9.6	5.7	2.6	2.1	0.6
Reduction (%)	--	41	73	78	94

*) values as found; recovery approx. 80 %.

In a first experiment the effect of dilution on filtration efficiency was estimated (diluted cigarette vers. dilution holes taped closed cigarette). A dilution of 10-13 % effects a 33 % reduction of DMN.

SERVICE FOR OTHER GROUPS

- 35 tobacco lots (TLA) and one cigarette brand (UK) were analyzed for ISH.
- 24 NINO extracts and 20 tobacco samples were analyzed for potassium, calcium and magnesium by atomic absorption.

REFERENCES

- (1) F. Moser, PME Monthly Progress Report, April 1980
- (2) F. Moser, PME Monthly Progress Report, May 1980

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